

# **Patent claims**

1. A method for the treatment of covering materials for vehicle interior fitting pieces, in particular for pieces of trim or seats of a motor vehicle, in which the moisture content of the covering material is temporarily increased, characterized in that the fibers of the covering material are softened in a treatment chamber (8) by the supply of moisture and smoothed by the action of a drawing force extending the covering material.
2. The method as claimed in claim 1, characterized in that the moisture content of the fibers after the moistening in the treatment chamber (8) is between 2 and 10% by weight, preferably approximately 5% by weight.
3. The method as claimed in claim 1 or 2, characterized in that the moisture content of the fibers is measured directly or indirectly and the moistening is continued until a predetermined moisture content is reached.
4. The method as claimed in one of claims 1 to 3, characterized in that the moistening in the treatment chamber takes place at an air temperature of 100 to 150°C, preferably between 125 and 130°C.
5. The method as claimed in one of the preceding claims, characterized in that the addition of moisture to the treatment chamber takes place by the supply of steam, in particular water vapor.
6. The method as claimed in claim 5, characterized in that additives, in particular odorous substances, moving auxiliaries or stain-inhibiting addition agents are added to the steam.

7. The method as claimed in one of the preceding claims, characterized in that the drawing force is produced by depositing the covering material onto an elastically compressible base, in particular of an elastically deformable foam material.  
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8. The method as claimed in claim 7, characterized in that the covering material is moistened in the treatment chamber after depositing it onto the elastically compressible base.  
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9. The method as claimed in claim 7, characterized in that the covering material is moistened in the treatment chamber and subsequently is deposited onto the base with elastic compression of the latter.  
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10. The method as claimed in one of the preceding claims, characterized in that the covering material is dried after the moistening.  
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11. The method as claimed in claim 9, characterized in that the moisture content of the fibers after the drying is between 0 and 1.0% by weight, preferably between 0.05 and 0.25% by weight.  
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12. The method as claimed in claim 10 or 11, characterized in that the drying takes place in the same treatment chamber (8) as the moistening.  
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13. The method as claimed in claim 10 or 11, characterized in that the drying takes place in a second treatment chamber (11) following the treatment chamber for the moistening.  
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14. The method as claimed in claim 10 or 11, characterized in that the drying takes place outside the treatment chamber (8).

15. The method as claimed in one of claims 10 to 14, characterized in that the moisture of the fibers is measured directly or indirectly and the covering material is dried until a predetermined residual moisture is reached.
16. The method as claimed in one of the preceding claims, characterized in that a plurality of covers provided for moistening are grouped on a transport auxiliary device, in particular a pallet (2), and are supplied together to the treatment chamber (8).
17. The method as claimed in one of the preceding claims, characterized by the steps:
- determination of the covering material to be treated in the treatment chamber (8) and/or accessory parts to be treated at the same time in the treatment chamber as a consequence of being directly or indirectly connected to said covering material
  - selection of treatment parameters which are suitable for the treatment of the covering material and/or avoid damaging the accessory parts to be treated at the same time
  - treatment of the covering material and/or accessory parts to be treated at the same time using the selected treatment parameters.
18. The method as claimed in claim 17, characterized in that the covering material to be treated, accessory parts to be treated at the same time as the latter and/or a transport auxiliary device (used if appropriate) are provided with means for identifying the covering material and/or the accessory parts.
19. The method as claimed in claim 18, characterized

in that the identification means permit an automated recognition.

- 5 20. The method as claimed in claim 19, characterized in that the identification means comprise a bar code and/or a coding on a chip (4).
- 10 21. The method as claimed in one of the preceding claims, characterized in that moisture- and/or temperature-sensitive regions of the covering material or the accessory parts are covered during the treatment in the treatment chamber (8).
- 15 22. The method as claimed in one of the preceding claims, characterized in that moisture- and/or temperature-sensitive regions of the covering material or accessory parts are protected during the treatment in the treatment chamber (8) by localized reduction of the effect of treatment devices.
- 20 23. The method as claimed in one of the preceding claims, characterized in that moisture- and/or temperature-sensitive accessory parts are brought into direct or indirect connection with the covering material only after treatment of the latter in the treatment chamber (8).
- 25 24. The method as claimed in one of claims 5 to 23, characterized in that the steam is introduced into the treatment chamber (8) via steam nozzles (10).
- 30 25. The method as claimed in claim 24, characterized by the steps:
- 35 - determination of the contour of the covering material to be treated
- setting a predetermined distance between the steam nozzles (10) and the covering material
- treatment of the covering material in the

treatment chamber (8).

- 5        26. The method as claimed in claim 25, characterized in that the determination of the contour takes place by mechanical scanning of the covering material.
- 10       27. The method as claimed in claim 25, characterized in that the determination of the contour takes place without contact, in particular using ultrasonic or laser sensors (9).
- 15       28. The method as claimed in one of the preceding claims, characterized in that the covering material is additionally subjected in the treatment chamber (8) to automatic mechanical processing in particular by means of brushes or rollers.
- 20       29. An interior fitting piece having a covering material treated by methods as claimed in one of claims 1 to 28.
- 25       30. The interior fitting piece as claimed in claim 29, characterized in that an elastically compressible base, in particular of an elastically deformable foam material, is arranged under the covering material.
- 30       31. The interior fitting piece as claimed in claim 29, characterized in that the interior fitting piece comprises an elastically upholstered vehicle seat and/or elastically upholstered seat add-on parts with an upholstery cover.
- 35       32. The interior fitting piece as claimed in claim 29, characterized in that the interior fitting piece comprises an extensive piece of trim for the vehicle interior with a rigid support, a covering

material and an upholstered layer arranged between the support and covering material.

- 5      33. The interior fitting piece as claimed in claim 32, characterized in that the piece of trim is designed as a roof lining, door or pillar trim or dashboard.